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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,562	11/02/2000	Mark A Gladden	020533.0330	6679

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EXAMINER

JUNTIMA, NITTAYA

ART UNIT PAPER NUMBER

2663

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/705,562	GLADDEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nittaya Juntima	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 3-7, 17-21 and 31-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-44 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8-16, 22-30 and 36-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to the amendment filed on 5/2/2005.
2. Claims 3-7, 17-21, and 31-35 are cancelled as per applicant's amendment.
3. Claims 42-44 are allowed.
4. Claims 1-2, 8-11, 12, 14, 16, 22-24, 27-30, 36-39, and 41 remain rejected under 35 U.S.C. 102(b).
5. Claims 13, 15, 25-26, and 40 remain rejected under 35 U.S.C. 103(a).

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 8-11, 12, 14, 16, 22-24, 27-30, 36-39, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by are rejected under 35 U.S.C. 102(b) as being anticipated by Petersen (USPN 5,805,588).

Per claims 1 and 28, Petersen teaches:

A memory (TS store 56, Fig. 17) for receiving samples (samples) of a first input signal (audio wave form from telephone set T1, Fig. 17) over a first communication channel (TS#1 in Fig. 18 carries sample from telephone T1) corresponding to a first communication device (telephone set T1, Fig. 17) and a second input signal (audio wave form from telephone set T3,

Art Unit: 2663

Figs 5 and 17) over a second communication channel (time slot#2 in Fig. 18 carries sample from telephone T2) corresponding to a second communication device (telephone set T2). See col. 7, ll 20-23 and col. 15, ll 1-7, 30-39, and 47-50.

A processor (a cell assembly multiplexor 58 coupled to TS store 56) operable to receive the samples from the memory (col. 15, ll 47-48), generate a first plurality of datagrams (micro cells) containing at least a portion of the samples of the first input signal (cells #1, belonging to telephone set T1 and containing sample(s), are generated by multiplexor 58 in each frame, col. 7, ll 47-52, Fig. 8, and col. 17, ll 5-8, 13-21, 24-26), generate a second datagram containing a portion of the samples of the second input signal (cell#2 is generated by multiplexor 58, col. 7, ll 19-23 and col. 17, ll 5-8 and 13-21), the second datagram is staggered from each of the first plurality of datagrams such that the second datagram is ready for communication at a different time than any of the first plurality of datagrams (cell#2 is transmitted at a different time than any of cells#1, Fig. 5, col. 7, 19-23 and 47-25).

Peterson further teaches that four datagrams (microcells number 1, 2, 3, and 4 in Fig. 5) are sent at each 125  $\mu$ s (col. 7, ll 19-20), wherein each datagram are transmitted as soon as the first sample is received (Fig. 8 and col. 7, ll 47-52), and datagrams (cells) are generated by the processor (cell assembly multiplexor 58, Fig. 17) at a frequency which is controlled by the internal clock signal (col. 17, ll 5-23). Therefore, the processor (cell assembly multiplexor 58, Fig. 17) must generate the second datagram, i.e. cell#2, by starting a timer (a clock signal measuring a first time interval of 125/4  $\mu$ s in a 125  $\mu$ s frame shown in Fig. 5) at a time when one of the first plurality of datagrams, e.g. cell#1 in Fig. 5, is ready for communication, wherein the timer is started by an interrupt (e.g. when a first sample associated with time slot#1 is received

Art Unit: 2663

from telephone T1), and establishing the second communication channel (i.e. transmitting cell#2) near a time when the timer elapses (a clock signal measuring a first time interval of  $125/4 \mu\text{s}$  in a  $125 \mu\text{s}$  frame ends) in response to a timer completion interrupt signal (a clock signal measuring a second time interval of  $125/4 T_s$  in a  $125 \mu\text{s}$  frame following a first time interval).

Per claims 2, 16, and 29, Petersen teaches that a predetermined amount of time ( $31.25 \mu\text{s}$ ) approximately equals to a communication time (31.25 microseconds) of one of the first plurality of datagrams (cell no. 2 is staggered from cell no. 1 in frame 1 by  $31.25 (125/4) \mu\text{s}$ , Fig. 5 and col. 7, ll 19-23).

Per claims 8, 22, and 36, Petersen teaches receiving the samples over a bus (time slot stream connecting A/D 54 to TS store 56 as shown in Figs. 17 and 18), the bus operable to support communication over a plurality of communication channels (time slot #1- time slot #n) (col. 15, ll 34-40 and 45-48).

Per claims 9, 23, and 37, Petersen teaches that the bus (time slot stream connecting A/D 54 to TS store 56 as shown in Figs. 17 and 18) comprises a plurality of windows (time slots) and establishing an active channel (time slot #1 carrying sample for telephone set 1) using one of the windows at a time when one (telephone set 1) of communication devices becomes active (col. 15, ll 15-21 and 34-35).

Per claims 10, 24, and 38, Petersen teaches that a first active channel (time slot #1 carrying sample for telephone set 1) uses a first window (time slot 1) of the bus (time slot stream connecting A/D 54 to TS store 56 as shown in Figs. 17 and 18) and another active channel (time slot #2 carrying sample for telephone set 2) use a first available window (time slot#2) following an occupied window (time slot #1) of the bus (col. 15, ll 15-21 and 34-37).

Art Unit: 2663

Per claims 11 and 39, Petersen teaches establishing the second channel/the other active channel (time slot #2 carrying sample for telephone set 2) near a time when the timer elapses (a clock signal measuring a first time interval of  $125/4 T_s$  in a  $125T_s$  frame ends, Fig. 5, col. 7, ll 19-20, and col. 17, ll 5-23).

Per claim 12, Petersen teaches generating the samples of the first and second input signals (col. 15, ll 15-21 and 34-36).

Per claims 14, 27, and 41, Petersen teach that each of the datagrams (PR-PDU-cells) comprises an ATM cell (an ATM cell of 53 bytes) containing a predetermined number of samples (number of time slots contained in VC-PDUs, col. 19, ll 29-32) (Fig. 26 shows a PR-PDU-cell of 56 bytes comprising an ATM cell where the user data are contained in different time slots, which, in the case, belong to the same connection, col. 18, ll 47-49, and col. 19, ll 33-36).

Per claim 30, Petersen teaches that the memory (TS store 56 in Figs. 17 and 20) comprises a first buffer (TS1 in TS store 56) corresponding to the first communication device (telephone set T1) and a second buffer (TS3 in TS store 56) corresponding to the second communication device (telephone set T3) (col. 15, ll 34-37, 47-50, and col. 16, ll 26-29).

10. Claims 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (USPN 5,805,588).

Claims 15 and 25 are system claims corresponding to method claims 1 and 11, and are rejected under the same reason set forth in the rejection of claims 1 and 11 with an addition that Petersen does not teach at least one computer readable medium and software encoded on the computer readable medium. However, it would have been obvious to one skilled in the art to include at least one computer readable medium and software encoded on the computer readable

Art Unit: 2663

medium as recited in the claim. The suggestion/motivation to do so would have been to provide a portable and computer compliant container for the software and to control the functioning of computer hardware and direct its operation as recited in the claim, respectively.

8. Claims 13, 26, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (USPN 5,805,588) in view of Holler (USPN 6,717,955 B1).

Per claims 13, 26, and 40, Petersen fails to teach using different compression methods.

However, Holler teaches using different compression methods (a suitable voice codec and silence removal) (Abstract, ll 6-10).

Given the teaching of Holler, it would have been obvious to one skilled in the art to include different compression methods into the teaching of Petersen. The motivation/suggestion to do so would have been to provide an option for voice compression (Abstract, ll 6-10).

### ***Response to Arguments***

9. Applicant's arguments filed 5/2/2005 have been fully considered but they are not persuasive.

A. In the remarks regarding claims 1, 15, and 28, the applicant argued that Petersen does not teach or suggest staggering the establishment of communication channels with a timer in order to reduce the likelihood of contention.

In response, since Peterson teaches that

- *4 microcells are sent at are sent at each 125  $\mu$ s*" (col. 7, ll 19-20),
- each datagram are transmitted as soon as the first sample is received, "*..transmit the micro cell as soon as the first sample is received..*" (Fig. 8 and col. 7, ll 47-52), and

Art Unit: 2663

- datagrams (cells) are generated by the processor (cell assembly multiplexor 58, Fig. 17) at a frequency which is controlled by *the internal clock signal* (col. 17, ll 5-23),

it is inherent that the processor (cell assembly multiplexor 58, Fig. 17) must generate the second datagram, i.e. cell#2, by starting a timer (a clock signal measuring a first time interval of  $125/4 \mu\text{s}$  in a  $125 \mu\text{s}$  frame shown in Fig. 5) at a time when one of the first plurality of datagrams, e.g. cell#1 in Fig. 5, is ready for communication, wherein the timer is started by an interrupt (e.g. when a first sample associated with time slot#1 is received from telephone T1), and establishing the second communication channel (i.e. transmitting cell#2) near a time when the timer elapses (a clock signal measuring a first time interval of  $125/4 \mu\text{s}$  in a  $125 \mu\text{s}$  frame ends) in response to a timer completion interrupt signal (a clock signal measuring a second time interval of  $125/4 \mu\text{s}$  in a  $125 \mu\text{s}$  frame following a first time interval). Further, Petersen teaches that *"Samples from successive frames are stored in the time slot store 56 until the last time slot of the PR-PDU-cell is filled. When the last time slot has been filled this is indicated by setting cell qualifier 66 to 1. . . It is now time to deliver the PR-DDU-cell"* (col. 17, ll 6-11 and Fig. 17). Therefore, Petersen clearly teaches that the establishment of communication channels (transmission of cells# 1, 2, 3, and 4 in Fig. 5 each carrying respective time slot samples from corresponding telephones) are staggered with a timer (clock signal is used to send out 4 different cells within a  $125 \mu\text{s}$  frame, Fig. 5) in order to reduce the likelihood of contention (samples are stored and packetized into cell and transmitted, Fig. 17).

Note that it is the data samples that are being stored/queued, not the datagrams (cells), see col. 17, ll 6-23. Col. 17, ll 32-33 recites that *"The index address of this cell is now queued in the queue means 74,..."* not the datagrams (cells) as argued by the applicant either.



Art Unit: 2663

In addition, it is noted that the features upon which applicant relies (i.e., varying the interval, i.e. the number of samples discarded and/or the time that the samples are collected (page 18, ll 3-3-6), with a timer to delay the establishment of a communications channels) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, the rejection is sustained.

### *Conclusion*

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.


Art Unit: 2663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima  
July 19, 2005

*NJ*

  
RICKY NGO  
PRIMARY EXAMINER

*7/20/05*